Please replace the paragraph beginning at page 6, line 29, with the following rewritten paragraph:

A2

-- A latch mechanism 30 is provided which includes a button 32 mounted in outer sleeve 16A of the housing. Button 32 is biased toward the latched position shown in Fig. 1B by compression spring 34 mounted inside collar 36 extending from housing sleeve 16A, spring 34 extending between an outside wall of housing sleeve 16A and an inside wall of button 32. Button 32 has an enlarged, generally circular, inner end 38 and a narrower shaft portion 40 connecting the large end 38 to the remainder of the button 32. Sleeve 18 has a keyhole slot formed on the side thereof adjacent button 32, the slot having an enlarged forward portion 42 which is slightly larger than enlarged tip 38 of button 32, and a narrower rear portion 44 (Fig. 1B) which is slightly larger than shaft portion 40 of the latch button 32, but significantly smaller than enlarged portion 38. --

Please replace the paragraph beginning at page 7, line 7, with the following rewritten paragraph:

A3

-- In operation, the nozzle assembly 14 is initially in the released position shown in Fig. 1A. When the operator places a tip 10 over the end of nozzle 12 and starts to push down to mount the tip 10 on the nozzle 12, the first thing that happens is that the bottom of tip 10 engages the distal or outer end 48 of ejector sleeve 18, pushing sleeve 18 into housing 16 between housing sleeve 16A and 16B against the bias force of spring 24. As force continues to be exerted on tip 10 to mount it to nozzle 12, the tip 10 eventually makes contact with the nozzle 12 and becomes mounted thereto. Once the force exerted through tip 10 on nozzle 12 exceeds the bias force of spring 20, nozzle 12 moves rearward in housing 16 against the bias of spring 20, preventing excessive force from being applied to mount tip 10 to nozzle 12. The force with which the tip is mounted to the nozzle 12 is thus carefully controlled so as to be enough to seal the nozzle/tip joint and to keep the tip 10 in place, while still leaving the tip 10 easily removable. As tip 10 continues to be pushed against nozzle 12, sleeve 18 is ultimately moved against the bias of spring 24 to a position where the enlarged portion 42 of the slot in sleeve 18 is

adjacent large portion 38 of button 32. When this happens, button 32 is moved outward under the bias force of spring 34 to move enlarged portion 38 into opening 42 in ejector sleeve 18, thereby latching nozzle assembly 14 in the latched position shown in Fig 1B. The click from latch 30 engaging provides an audible feedback to the operator, and the movement of button 32 also provides a tactile and visual feedback to the operator, that the tip 10 is fully mounted so that the operator may terminate the mou ting operation. If the user continued to exert force after latching occurs, sleeve 48 ultim ly bottoms against housing 16, thus limiting travel of tip 10 and limiting the mou g force on the tip 10 to that exerted by compressed spring 20. When the operator rele es tip 10, nozzle 12 is moved by its bias spring 20 to the position shown in Fig. 1B, this being the final position of the nozzle assembly 14 with the tip 10 mounted and the assembly in its latched position. --

A3

Please replace the paragraph beginning at page 8, line 15, with the following rewritten paragraph:

A4

-- Figs. 2A - 2D show an alternative embodiment of the invention which has an alternative latch mechanism 30' and also has an overforce feature not present in the embodiment of Figs. 1A-1B. In particular, sleeve 18', rather than having a keyhole slot formed in its side, has a flange 60 with a shoulder 62 and an angled outer wall 64 formed at the bottom or inner end thereof. Latch 30' includes a slotted plate 66 which is biased to the latched position shown in Fig. 2B by tension spring 67 extending between posts fixed to housing portion 16C and to plate 66. Plate 66 also has an extended groove 84 formed on the inner side thereof, which groove 84 may for example extend for approximately 90° and which has an upper shoulder 70. Plate 66 slides on a housing member 16C and is guided by four pins 72 extending from housing member 16C, which pins fit in mating slots 74 in plate 66 (see Fig. 2D). Plate 66 has an insert 76 with an angled inner wall 78. Plate 66 also has an opening 80 in its top through which sleeve 18' and nozzle 12 extend. --

Please replace the paragraph beginning at page 8, line 28, with the following rewritten paragraph:

A5

-- In operation, latch assembly 30' is initially in the released position shown in Fig. 2A. As for the embodiment of Figs. 1A-1B, when tip 10 is mounted over nozzle 12, it initially makes contact with shoulder 48 of sleeve 18' moving the sleeve into the nozzle assembly 14' against the force of spring 24. --

Please replace the paragraph beginning at page 9, line 1, with the following rewritten paragraph:

A6

-- This procedure continues until tip 10 has been mounted to nozzle 12 with sufficient force, at which time nozzle 12 also starts to move backwards against the force of spring 20. It is noted that for this embodiment of the invention, spring 20 engages a shoulder 22' on the nozzle 12 rather than a ring 22. Thus, as for the previous embodiment, the force with which tip 10 is mounted to nozzle 12 is controlled. When ejector sleeve 18' has been retracted to a position where shoulder 62 of flange 60 is adjacent shoulder 70 of slot 68, plate 66 may move under the force of the bias applied thereto by spring 67 to move shoulder 70 over shoulder 62, thereby engaging latch 30' to hold ejector sleeve 18' in the retracted position. As for the prior embodiment, this results in audio, tactile and visual feedback to the operator that the tip 10 is fully mounted and that the mounting operation may be terminated. Once the operator removes insertion pressure from the tip 10, spring 20 returns the nozzle 12 to the latched position shown in Fig. 2B. --

Please replace the paragraph beginning at page 9, line 13, with the following rewritten paragraph:

A7

-- When latch 30' is to be released, the operator presses on surface 82 of plate 66, moving the plate to its released position against the bias force applied thereto by spring 67. This moves shoulder 70 of slot 68 away from flange 60, permitting ejector sleeve 18' to be moved to its released position by spring 24. As for the prior embodiment, with spring 24 having a significantly greater force than spring 20, this results in shoulder 48 of

A7

the ejector sleeve 18' striking tip 10 with sufficient force to eject the tip 10 from nozzle 12. --

Please replace the paragraph beginning at page 9, line 1, with the following rewritten paragraph:

A8

-- However, in the event the tip 10 becomes stuck as shown in Fig. 2C, pressure may continue to be exerted on surface 82 to force angled or wedge surface 78 of insert 76 against angled surface 64 of flange 60. This applies a wedge overdrive force through sleeve 18' to tip 10 which supplements the force provided by spring 24 so as to facilitate the removal of a stuck tip 10, thereby permitting sleeve 18' to return to its fully released position.--

Please replace the paragraph beginning at page 9, line 25, with the following rewritten paragraph:

A9

-- Figs. 3A-3D illustrate still another embodiment of the invention, which embodiment is utilized in conjunction with a pipette of the type described in application serial number 09/873,522 of the applicant entitled HAND HELD PIPETTE which is being filed concurrently herewith. As can be seen from these figures, the pipette of this embodiment is substantially the same as the pipettes of the prior embodiments except for the latching mechanism 30". For this embodiment of the invention, ejector sleeve 18' terminates in an angled flange 60 (Fig. 3B) having a shoulder 62 as for the embodiment of Fig. 2A-2D. As shown in Fig. 3B, shoulder 62 engages an internal end of a housing component 16A" when the mechanism is in its released position to define the end position of the ejector sleeve 18'. When in a latched position, as seen in Fig. 3D, shoulder 62 engages shoulders 90 of flanges 92 at the end of fingers 94. When button 32" is depressed, fingers 94 are moved down to move flange 92, and shoulder 90 thereof, out of contact with shoulder 62 of flange 60, permitting ejector sleeve 18' to return to the release position in a manner previously described to effect the ejection of tip 10. Fig. 3C illustrates nozzle 12 in the latched position. Except as indicated above, the embodiment of Figs. 3A-3D operates in substantially the same way as the embodiments previously described. --

Please replace the paragraph beginning at page 10, line 21, with the following rewritten paragraph:

A10

-- Referring to Fig. 4, nozzle 12 is connected at a point remote from the tip 10, for example at the inner end of the nozzle 12, to a position detector 100, which is shown in the figure as a linear encoder 100. A sensor 102 is also provided to detect when sleeve 18 has moved by its full stroke. Where a latch 30 is provided, as for the previous embodiments, operation of the latch may be detected to indicate full stroke for the sleeve 18. In Fig. 4, sensor 102 includes a flag 104 mounted to move with sleeve 18 and a sensor 106, for example an optical sensor, which triggers when the flag 104 reaches the sensor 106. While not shown in Fig. 4 to simplify the figure, this embodiment would also include springs 20 and 24 and related components, and may include a latch 30 when also used as a detipper. --

Please replace the paragraph beginning at page 10, line 30, with the following rewritten paragraph:

A11

-- In operation, each different tip type is designed to have slightly different base diameter, taper or other base dimension which does not affect its function, but which changes the point on the tip 10 at which nozzle 12 makes contact with the tip 10 relative to the tip end making contact with shoulder 48 of sleeve 18. This may also be achieved by providing an internal ring or shoulder 108 or some other feature on the inside of the tip base, the spacing of such shoulder from the base end of the tip or some other characteristic of the feature being controlled to indicate the tip type. Other detectable variations in the tip base are also possible to provide an indication of tip type. --

Please replace the paragraph beginning at page 11, line 6, with the following rewritten paragraph:

A12

-- The variations in the tip base indicated above result in there being variations in the displacement of nozzle 12 for different tip types when sensor 102 indicates that a full stroke has occurred for sleeve 18. Thus, the reading from encoder 100 when sensor 102 generates an output can serve as an indication of tip type, a processor controlling the pipetting operation correlating the encoder reading with the appropriate tip type. Where